

AMENDMENTS TO THE CLAIMS:

Claim 17 is canceled without prejudice or disclaimer. Claims 16, 18-47 and 56 are amended. The following is the status of the claims of the above-captioned application, as amended.

Claims 1-15 (Canceled).

Claim 16 (Currently amended). An isolated protease variant comprising an insertion, substitution or deletion of one of the amino acid residues K,H,R,E,D,Q,N,C,V,L,I,P,M,F,W,Y,G,A,S,T at position 62 in combination with at least one modification selected from the group consisting of:

*0AQSVPWG,
A1T,V,
Q2L,
S3T,A,L,
V4L,A,
I8V,T,
S9G,D,R,L,V,
R10H,K,
V11A,
A13V,
P14S,T,D,A,M,V,K,Q,L,H,R,I,
A15M,T,
A16P,
H17R,
N18S,H,
R19W,K,L,F,G,I,
G20*,A,
L21F,LP,LW,LA,LG,
T22S,A,K,TV,TG,TL,TW,TV,G,L,TY,
G23S,
S24P,
K27R,

V28I,
V30I,
I35T,V,
T38S,
P40L,
~~N43D,~~
R45H,K,
G46D,
A48T,
S49N,
F50S,
V51A,I,D,
P52V,A,
P55S,A,
~~S57P,~~
G61,R,GP,
~~T71A,~~
~~I72V,~~
L75I,
N76S,
N77S,
S78T,
V81A,
A85T,
~~S87C,~~
A88V,T,
E89G,
K94N,
~~L96LA,~~LG,
G100GE,
S101SA,SK,
A108V,T,S,
L111I,V,

A114V,
~~N116S,D,~~
G118D,
M119L,I,V,A,S,
~~H120N,D,Q,K,E,Y,S,~~
V121A,
L124C,
S128N,I, C,
P129PSN,T,E,~~D,S~~,N,A,
S130P,~~T,C~~,*,
~~S132G,T,~~
A133ASA,
T134A,
Q137H,E,D,
A138G,V,
V139L,I,
~~N140D,K,~~
~~T143A,~~
S144D,N,P,
R145G,
V150I,
A151V,G,
A152P,
A158V,~~G~~,L,M,
G160A,~~D,~~
S163G,~~G~~,N,A,
Y167K,
A168G,
A169G,
Y171C,
A172V,
~~N173D,~~
A174V,

M175L,I,V,A,S,T,
~~N183D,~~
~~N184D,S,~~
~~N185S,~~
R186L,G,H,
S188G,
S190A,
Y192H,
G195F,E,
V203S,,F,
~~N204T,~~
~~Q206L,~~
S212N,L,
T213A,
M222L,I,V,A,S,
A223G,
~~T224A,S,~~
A228T,
~~A230V,~~
V234I,
~~K237R,~~
N238D,
P239T,S,
S240F,
S242T,
V244I,M,A,
~~K251E,R,~~
A254S,
T255A,S,
S256N,G,
L257G,
G258K,
S259A,N,G,

T260A,R,
N261D,
L262S,Q,V,
Y263H,F,
G264E,
S265G,R,N,
V268L,I,
N269K,T,
E271A, and
T274S,L,A,R;

wherein the variant has protease activity and each position corresponds to a position of the amino acid sequence of subtilisin BPN' shown in SEQ ID NO: 1.

Claim 17 (Canceled).

Claim 18 (Currently amended). The protease variant of claim ~~47~~16, comprising a substitution of one of the amino acid residues K,H,R,E,D,Q,N,C,V,L,I,P,M,F,W,Y,G,A,S,T at position 62.

Claim 19 (Currently amended). The protease variant of claim ~~47~~16, comprising one modification selected from the group consisting of:

*0AQSVPWG,
A1T,V,and
Q2L,
~~_____S3T,A,L, and~~
~~_____V4L,A.~~

Claim 20 (Currently amended). The protease variant of claim ~~47~~16, comprising one modification selected from the group consisting of:

I8V,T,
S9G,D,R,L,V,
R10H,K, and
V11A.

Claim 21 (Currently amended). The protease variant of claim ~~47~~16, comprising one modification selected from the group consisting of:

A13V,
P14S,T,~~D~~,A,M,V,~~K~~,Q,L,H,R,I,
A15M,T,
A16P, and
H17R.

Claim 22 (Currently amended). The protease variant of claim ~~47~~16, comprising one modification selected from the group consisting of:

N18S,H,
R19W,K,L,F,G,I,
G20*, A,
L21F,LP,LW,LA,LG, and
T22S,A,~~K~~,TV,TG,TL,TW,TV,G,L,TY.

Claim 23 (Currently amended). The protease variant of claim ~~47~~16, comprising one modification selected from the group consisting of:

G23S,
S24P,
~~K27R~~,
V28I, and
V30I.

Claim 24 (Currently amended). The protease variant of claim ~~47~~16, comprising one modification selected from the group consisting of:

I35T,V,
T38S,
P40L,
~~N43D~~, and
R45H,~~K~~.

Claim 25 (Currently amended). The protease variant of claim ~~47~~16, comprising one modification selected from the group consisting of:

G46D,
A48T,
S49N,
F50S, and
V51A,I,~~D~~.

Claim 26 (Currently amended). The protease variant of claim ~~47~~16, comprising one modification selected from the group consisting of:

P52V,A,
P55S,A,and
~~S57P~~,
G61R,GP,and
~~_____~~T71A.

Claim 27 (Currently amended). The protease variant of claim ~~47~~16, comprising one modification selected from the group consisting of:

~~I72V~~,
L75I,
N76S,
N77S, and
S78T.

Claim 28 (Currently amended). The protease variant of claim ~~47~~16, comprising one modification selected from the group consisting of:

V81A,
A85T,
~~S87C~~,
A88V,T, and
E89G.

Claim 29 (Currently amended). The protease variant of claim ~~47~~16, comprising one

modification selected from the group consisting of:

K94N,
L96LA, LG,
G100GE, and
S101SA, SK.

Claim 30 (Currently amended). The protease variant of claim ~~47~~16, comprising one modification selected from the group consisting of:

A108V, T, S, and
L111I, V,
~~—~~ A114V, and
~~—~~ N116S, D.

Claim 31 (Currently amended). The protease variant of claim ~~47~~16, comprising one modification selected from the group consisting of:

G118D,
M119L, I, V, A, S,
~~H120N, D, Q, K, E, Y, S,~~
V121A, and
L124C.

Claim 32 (Currently amended). The protease variant of claim ~~47~~16, comprising one modification selected from the group consisting of:

S128N, I, C,
P129PSN, T, E, D, S, N, A, and
S130P, T, C, *.

Claim 33 (Currently amended). The protease variant of claim ~~47~~16, comprising one modification selected from the group consisting of:

~~S132G, T,~~
A133ASA,
T134A,

Q137H,E,D, and
A138G,V.

Claim 34 (Currently amended). The protease variant of claim ~~47~~16, comprising one modification selected from the group consisting of:

V139L,I,
~~N140D,K,~~
~~T143A,~~
S144D,N,P, and
R145G.

Claim 35 (Currently amended). The protease variant of claim ~~47~~16, comprising one modification selected from the group consisting of:

V150I,
A151V,G,
A152P,
A158V,G,M, and
G160A,~~D.~~

Claim 36 (Currently amended). The protease variant of claim ~~47~~16, comprising one modification selected from the group consisting of:

S163G,~~G~~,N,A,
Y167K,
A168G,
A169G, and
Y171C.

Claim 37 (Currently amended). The protease variant of claim ~~47~~16, comprising one modification selected from the group consisting of:

A172V,and
~~N173D,~~
A174V,

M175L,I,V,A,S,T,~~and~~

~~N183D.~~

Claim 38 (Currently amended). The protease variant of claim ~~47~~16, comprising one modification selected from the group consisting of:

~~N184S,~~

~~N185S,D,~~

R186L,G,H,

S188G, and

S190A.

Claim 39 (Currently amended). The protease variant of claim ~~47~~16, comprising one modification selected from the group consisting of:

Y192H,

G195F,~~E,~~ and

V203F,

~~N204T and~~

~~Q206L.~~

Claim 40 (Currently amended). The protease variant of claim ~~47~~16, comprising one modification selected from the group consisting of:

S212N,L, and

T213A.

Claim 41 (Currently amended). The protease variant of claim ~~47~~16, comprising one modification selected from the group consisting of:

M222L,I,V,A,S,

A223G,

~~T224A,S,~~ and

A228T.

Claim 42 (Currently amended). The protease variant of claim ~~47~~16, comprising one modification selected from the group consisting of:

A230V,
V234I,
~~K237R~~,
N238D, and
P239T,S.

Claim 43 (Currently amended). The protease variant of claim ~~47~~16, comprising one modification selected from the group consisting of:

S240F,
S242T,
V244I,M,A,
~~K251E,R~~, and
A254S.

Claim 44 (Currently amended). The protease variant of claim ~~47~~16, comprising one modification selected from the group consisting of:

T255A,S,
S256N,G,
L257G,
G258K, and
S259A,N,G.

Claim 45 (Currently amended). The protease variant of claim ~~47~~16, comprising one modification selected from the group consisting of:

~~T260A,R~~,
~~N261D~~,
L262S,Q,V,
Y263H,F, and
G264E.

Claim 46 (Currently amended). The protease variant of claim ~~47~~16, comprising one modification selected from the group consisting of:

S265G,~~R~~,N,

V268L,I,
N269K,T,
E271A, and
T274S,L,A,R.

Claim 47 (Currently amended). ~~The~~ An isolated protease variant ~~of claim 17,~~ comprising:

Q2L+N62D,
S3L+N62D+S163A+S190A,
S3T+P14Q+A15M+R19K+N62D+S144D,
V4L+N62D+E89G,
S9R+A13V+A15T+I35V+N62D+Q245F,
S9R+A15T+G20*+L21F+P52T+N62D+Q245R,
S9R+A15T+G20*+L21F+N62D+Q245N,
S9R+A15T+G20*+L21F+N62D+Q245R,
S9R+A15T+G20*+L21F+N62D+Q245R+S259G,
S9R+A15T+G20*+L21F+N62E+Q245R,
S9R+A15T+G20*+L21F+N62NS+N218D+Q245R,
S9R+A15T+T22A+N62D,
S9R+A15T+T22TG+N62D+V139L+Q245G,
S9R+A15T+T22TG+N62D+V139L+Q245S,
S9R+A15T+T22TG+N62D+V139L+Q245V,
S9R+A15T+T22TL+N62D+I107V+V139L+Q245W,
S9R+A15T+T22TL+N62D+Q245W,
S9R+A15T+N62D+H120N+P131T,
S9R+A15T+N62D+Q245R+N252M,
S9R+A15T+N62D+Q245W+N252S,
S9R+A15T+N62D+Q245W+N252V,
S9R+A15T+N62ND+V139L+Q245E,
S9R+A15T+N62ND+V139L+N261D,
S9R+A15T+N62NG+Q245T,
~~R10H+N62D,~~
V11A+N62DE,
A15M+V30I+N62D+S99N+L111I+V244A+S265N,

N18S+N62D+I107T+A254S,
 I35T+N62D,
 S49N+N62D,
~~S57P+N62ND,~~
 G61R+N62D,
~~N62D+I72V,~~
 N62D+V81A+Q245R,
 N62D+V121A,
 N62D+P131F+A172V,
N62D+V139I+N183D+N185S+V203I+Q245R+L262S,
 N62D+N140K+T143A+S144D,
 N62D+R145G,
 N62D+V150I,
 N62D+A151G,
N62D+A169G+V203I+Q245R,
 N62D+S188G+K251R,
 N62D+Y214H+K237R,
 N62D+N238D,
 N62D+Q245A+N252G+S265G,
 N62D+S265G,
 N62ND+N184S+S256G,
 N62NE, or
 N62NE+V234I

wherein the variant has protease activity and each position corresponds to a position of the amino acid sequence of subtilisin BPN' shown in SEQ ID NO: 1.

Claim 48 (Canceled).

Claim 49 (Withdrawn). The protease variant of claim 16, which has ten modifications.

Claim 50 (Previously presented). The protease variant of claim 16, which is variant of a subtilase belonging to sub-group I-S1.

Claim 51 (Previously presented). The protease variant of claim 16, which is a variant of a subtilase belonging to sub-group I-S2.

Claim 52 (Previously presented). The protease variant of claim 16, which is a variant of subtilisin 309.

Claim 53 (Previously presented). A cleaning or detergent composition, comprising a protease variant of claim 16 and a surfactant.

Claim 54 (Previously presented). A composition of claim 53, which additionally comprises one or more of an amylase, cellulase, cutinase, esterase, beta-galactosidase, glycoamylase, hemicellulase, lactase, ligninase, lipase, polygalacturonase, and protease.

Claim 55 (Withdrawn). The protease variant of claim 16, comprising the following substitutions:
S9L+A15T+T22TV+V139L+Q245F+L262S.

Claim 56 (Currently amended). An isolated protease variant comprising an insertion, substitution or deletion of one of the amino acid residues
K,H,R,E,D,Q,N,C,V,L,I,P,M,F,W,Y,G,A,S,T at position 62 in combination with at least one modification selected from the group consisting of:
S9G,D,R,L,V,
P14S,T,D,A,M,V,K,Q,L,H,R,I,
R19W,K,L,F,G,I,
~~K237R~~, and combinations thereof.